

UF/IFAS AI AND DATA SCIENCE SEMINAR SERIES

**FRIDAY, MARCH 14, 2025
12:00P.M. - 01:00P.M.**

ZOOM:
<https://go.ufl.edu/5g8w7ep>

Robotic Technologies and Control Algorithms for Agricultural Robots

Field operations through robotic and AI technologies have become more and more important in the modern agricultural industry, particularly in specialty crops, which have the potential to address the pressing issues of labor shortages and cost increasing. In this talk, Dr. Yunjun Xu will focus on hardware platforms, mechanisms, and algorithms that have been developed in his group for field robot motion and control, multiple robots' row allocation, harvesting, anomalies detection, etc. Meanwhile, Dr. Xu will introduce several AI technologies currently being studied in the UCF Expanding AI program.



DR. YUNJUN XU

BIO

Yunjun Xu is a Professor in the Department of Mechanical and Aerospace Engineering at UCF. He got his PhD from the University of Florida. His research is in the general area of guidance, navigation and control and robotics. In the recent decade, his research team is heavily involved in developing robotic related technologies for specialty crops. He is currently leading a NIFA sponsored ExpandingAI project. He is an AIAA Associate Fellow and ASME Fellow.